

# New York State Department of Transportation

## Yellow Flag NB23U4W006

By: Malav Shah

Flag Date: April 18, 2023

Superseding Information:

No Flags Superseded

### Structure Information

**BIN: 1065318**

**Feature Carried: 278I278IX2M23027**

**Feature Crossed: 6TH AVENUE**

**Orientation: 8 - NORTHWEST**

**Region: 11 - NEW YORK CITY**

**County: KINGS**

**Political Unit: City of NEW YORK**

**Approximate Year Built: 1962**

**Posted Load Matches Inventory : Yes**

**Bridge Load Posting (Tons) : Not Posted for Load**

**Primary Owner: New York State Department of Transportation**

**Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party**

**Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder**

**This Bridge is not a Ramp**

**Number of Spans: 322**

### Verbal Notification Information

**Person Notified: Heinz Joachim, P.E.**

**Date: April 18, 2023 1:00:00 PM**

**Of: NYSDOT Region 11**

### Signature Information

**Signature: Malav Shah, P.E. 106620-1**

**Date: May 03, 2023**

**Reviewed By: Robert Kemp**

**Date: May 03, 2023**

**Attachments: 9**

**Flagged Elements**

Parent Element	Element	Total Quantity	Unit
<b>Span Number : 112</b>			
	113 - Steel Stringer	104	ft

**Flagged Condition Description**

This Yellow Flag No. NB23U4W006 is a new flag.

Location: Span 112, Stringer S1 at Pier 111.

Description: The web at the connection angle of Stringer S1 to Pier 111 has a corrosion hole measuring 4" H x 2 1/2" W at the upper section and a 13" H x 2 1/2"-3" W hole at the lower section and up to 3/16" deep section loss in the surrounding 22" H x 2" - 6" W area (Photo 5 and 6). The left side bottom flange angle has 3/16" D section loss for 3' L x 3" W with a 1 1/4" diameter corrosion hole at the horizontal leg. The vertical leg has 1/8" D section loss for 18" L x 3" H with 20% - 40% section loss at 6 rivet heads. The left side connection angle has up to 3/16" D section loss and 40% section loss at the 4 rivets and 2 bolt heads (Photo 7). The right bottom flange angle has up to 1/8" D section loss for 15" L with a 2" L x 5/8" W corrosion hole at the outstanding leg (Photo 8). The right connection angle has up to 1/8" D section loss at the lower 5" with 30% section loss at the lower 2 connectors (Photo 9).

Notes:

1. Stringer S1 receives no direct live loading, but supports the barrier/railing above on I278.
2. Adjacent Girder G1 has 1/16" section loss (Full Height x up to 5"W) along the connection angle on both sides of the girder web.
3. NSCO 22-0032 was issued previously for this location. There has been no significant changes to this member from the previous inspection.
3. The flagged condition is located above the center lane on 3rd Avenue WB roadway and was accessed using 30ft bucket truck with double left lane closure.

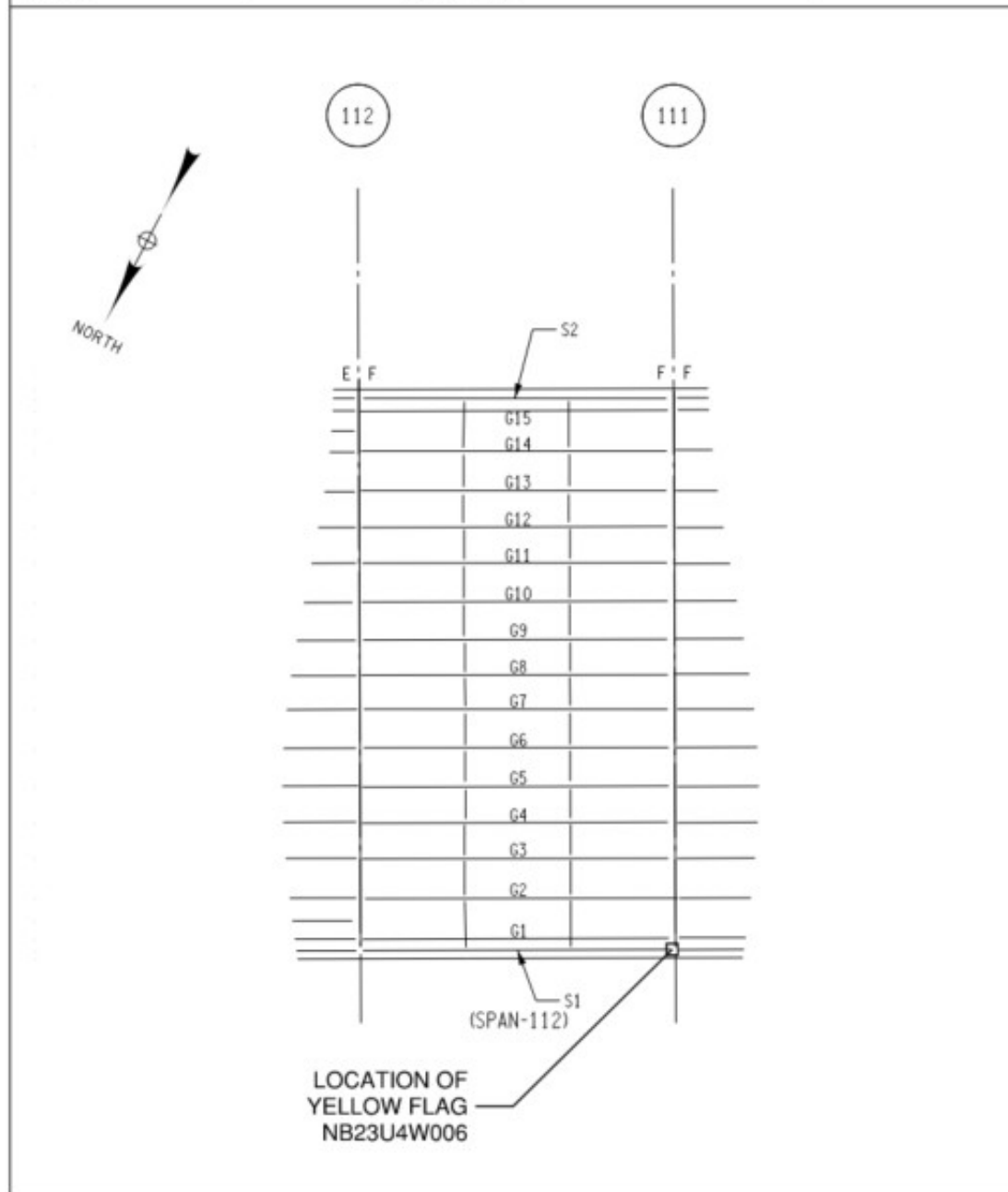
**Flag Photographs**Photo Number: **1**Photo Filename: **NB23U4W006 LOCATION PLAN.JPG**Gowanus Expressway  
2023 Biennial Inspection - Field SketchBIN: 1065318Team: MS / LTDate: 4/19/2023Span: 112Location: S1 AT PIER 111**Attachment Description: Yellow Flag Location Plan**

Photo Number: 2

Photo Filename: NB23U4W006 CONDITION SKETCH.JPG

Gowanus Expressway  
2023 Biennial Inspection - Field Sketch

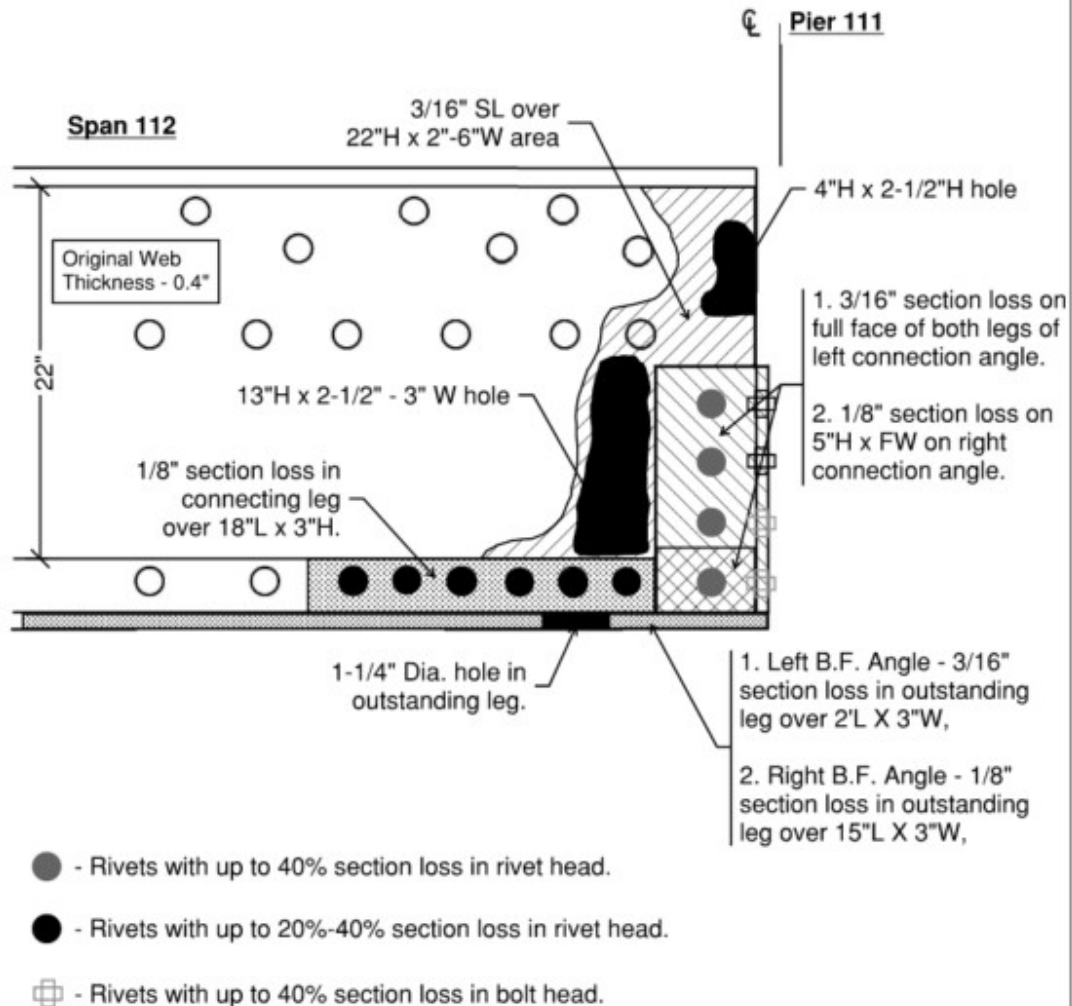
BIN: 1065318

Team: MS / CT

Date: 4/19/2023

Span: 112

Location: S1 AT PIER 111



**SKETCH FOR YELLOW FLAG # NB23U4W006**  
**SPAN 112, STRINGER S1 AT PIER 111**  
**(LOOKING RIGHT)**  
**N.T.S**

wsp

**Attachment Description: Yellow Flag Condition Sketch**

Photo Number: 3

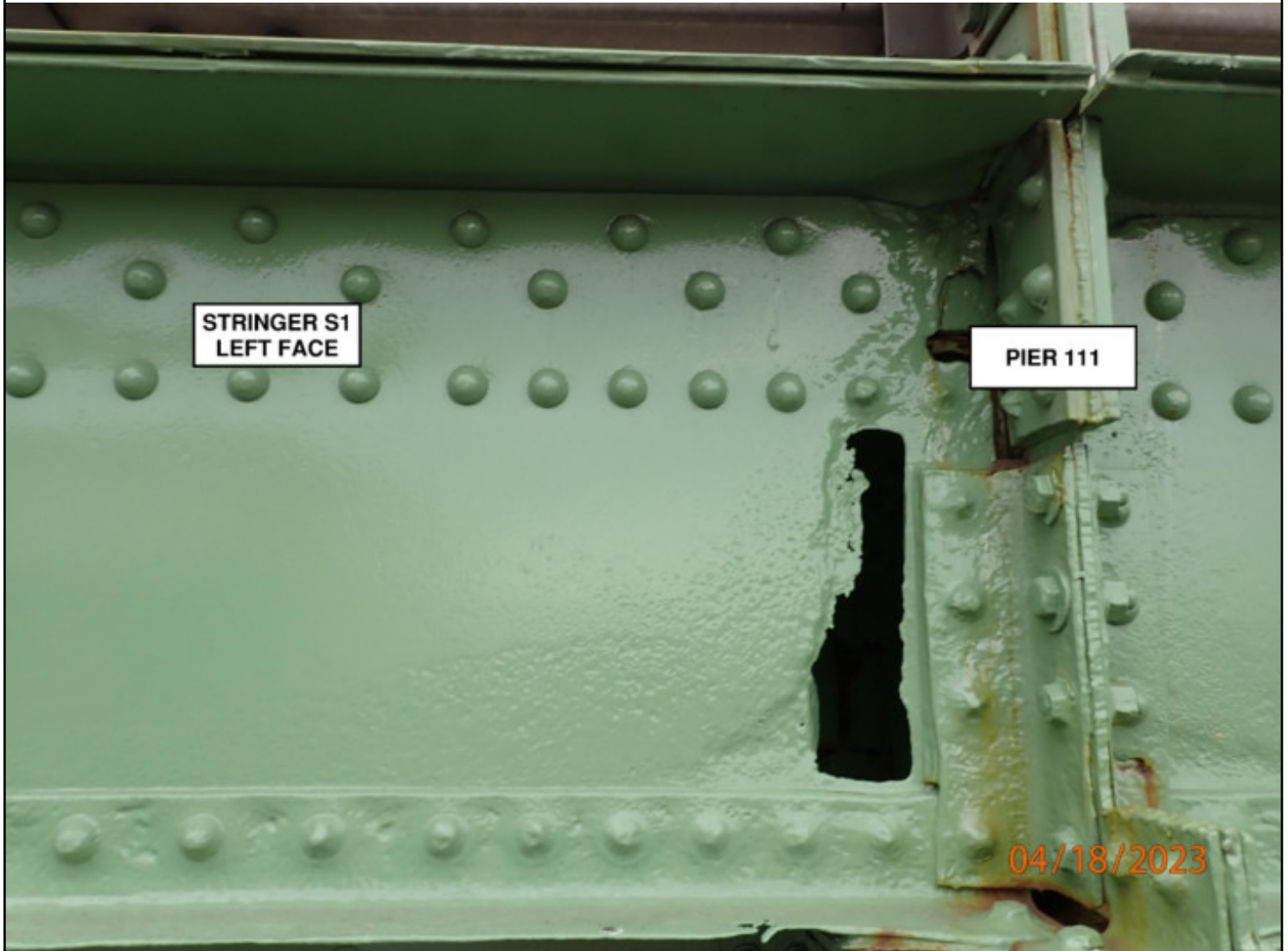
Photo Filename: P4192355.JPG



**Attachment Description:** General view of the flagged condition at Stringer S1 in Span 112 at Pier 111. Looking Begin.

Photo Number: 4

Photo Filename: P4182295.JPG

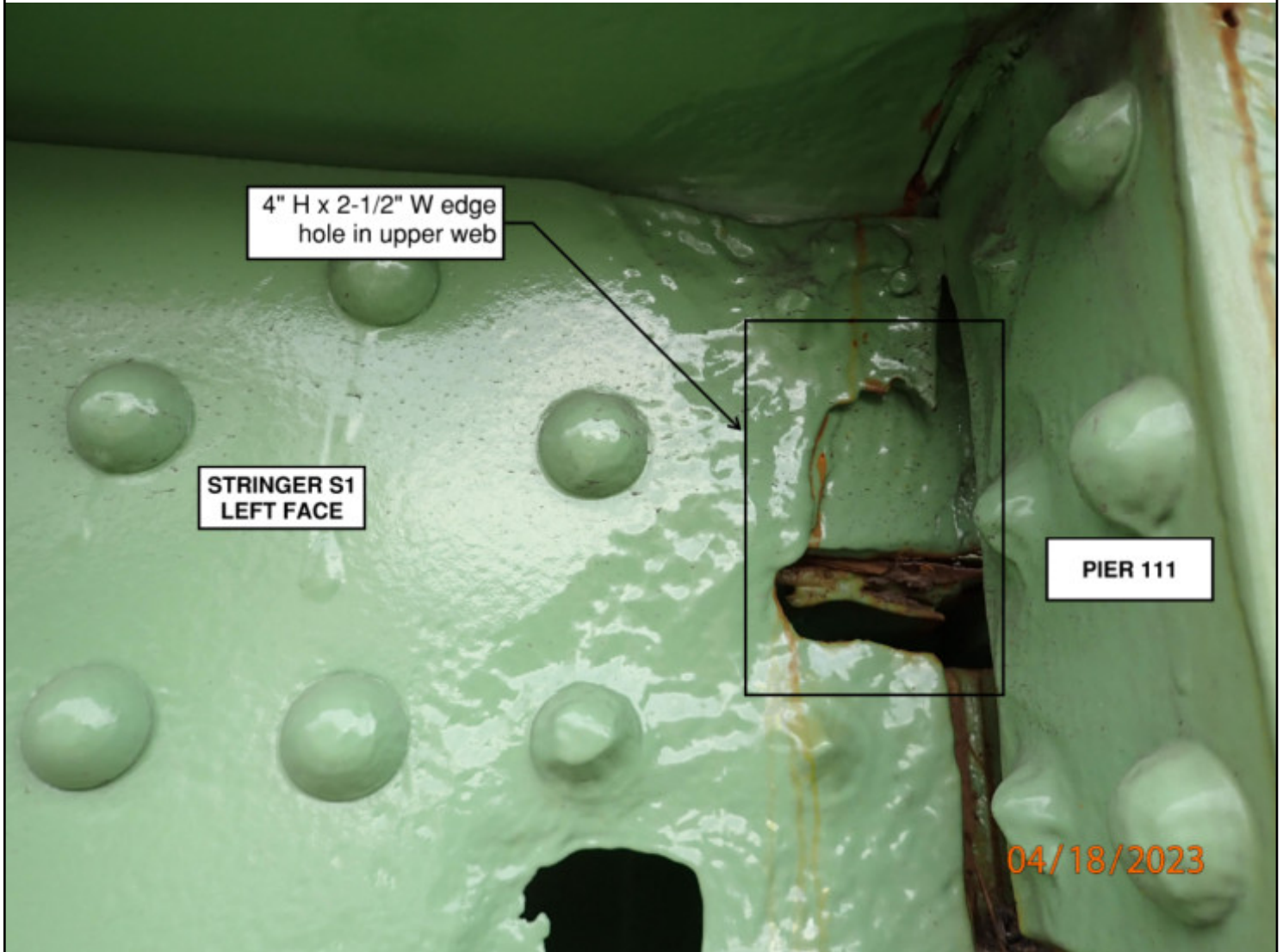


**Attachment Description:** General view of Stringer S1 at the connection to the pier cap of Pier 111. Looking Right.



Photo Number: 5

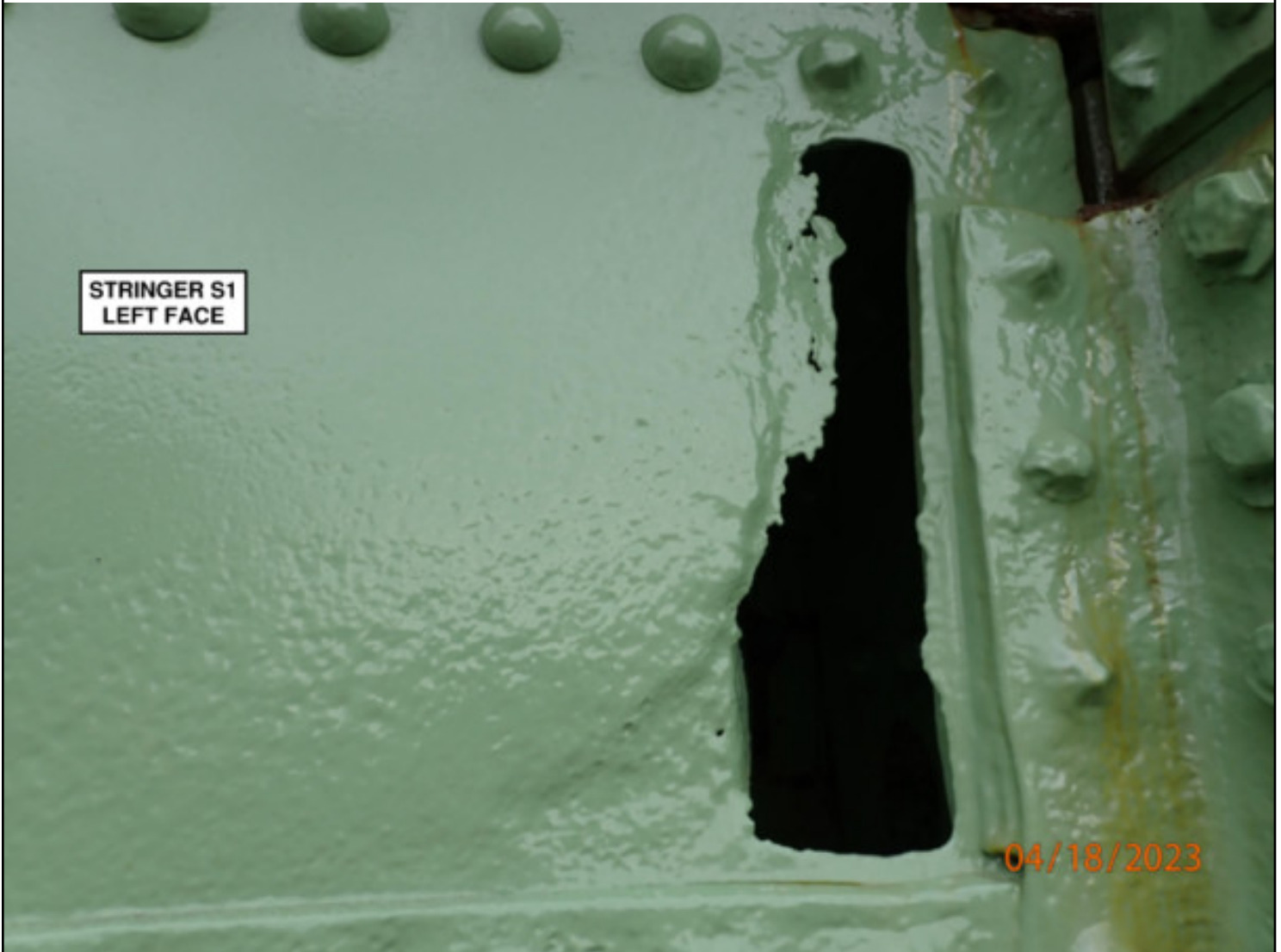
Photo Filename: P4182297.JPG



**Attachment Description:** Close-up view of the edge hole in the web of Stringer S1 at the connection to Pier 111. The upper web has a 4" H x 2-1/2" W edge hole above the connection angle. Looking Begin-Right.

Photo Number: 6

Photo Filename: P4182298.JPG



**Attachment Description:** Close-up view of hole in lower web section of Stringer S1 at the connection to Pier 111. The web at the connection angle has a 13" H x 2-1/2" to 3" W hole at the lower section. The surrounding 22" H x 2" - 6" W area has up to 3/16" D section loss. Looking Begin-Right.



Photo Number: 7

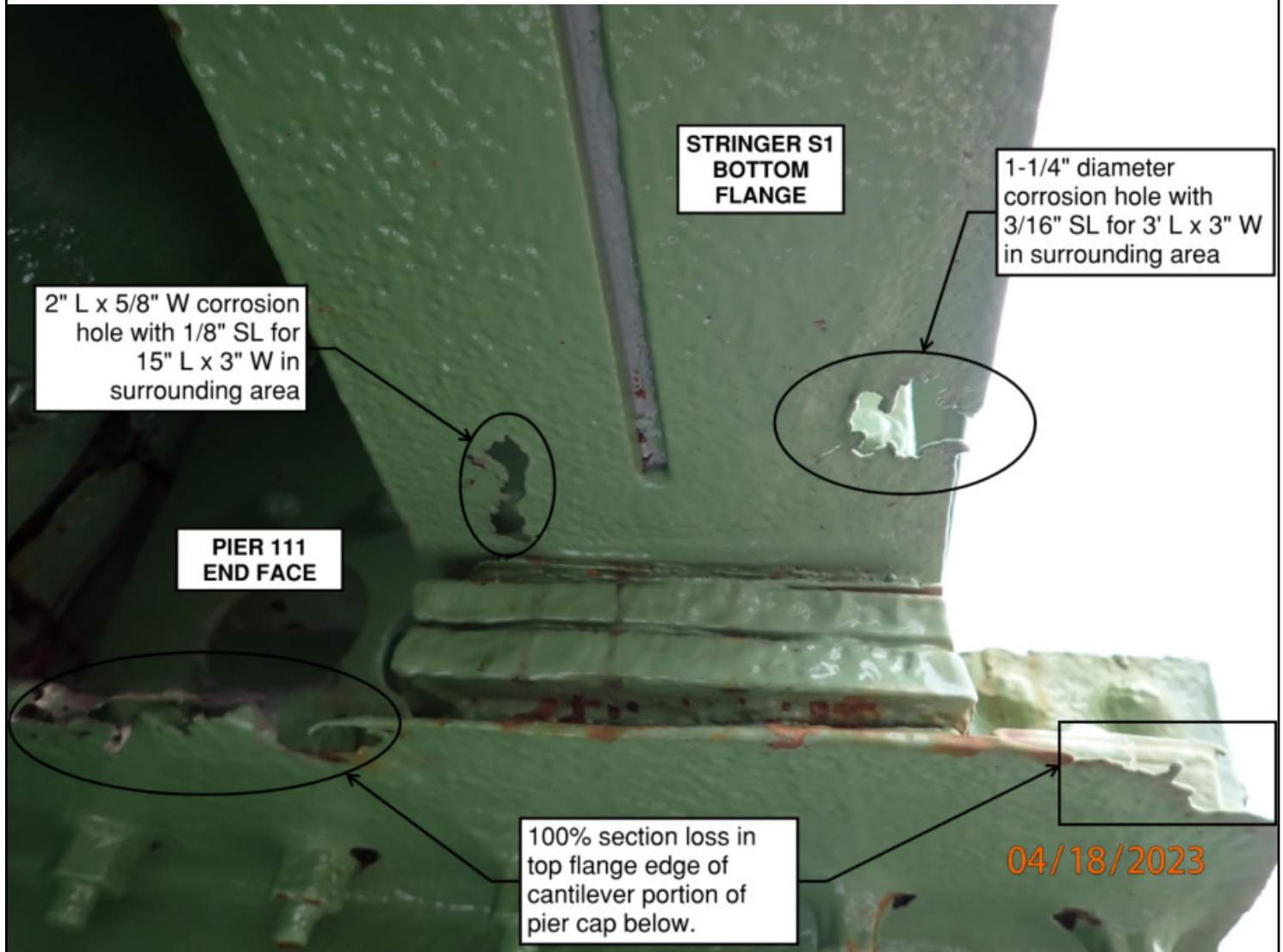
Photo Filename: P4182299.JPG



**Attachment Description:** Close-up view of the connection angle of S1 to Pier 111 on the left side. The left side connection angle has up to 3/16" D section loss and 40% section loss at 4 rivets and 2 bolt heads. Looking Begin-Right.

Photo Number: 8

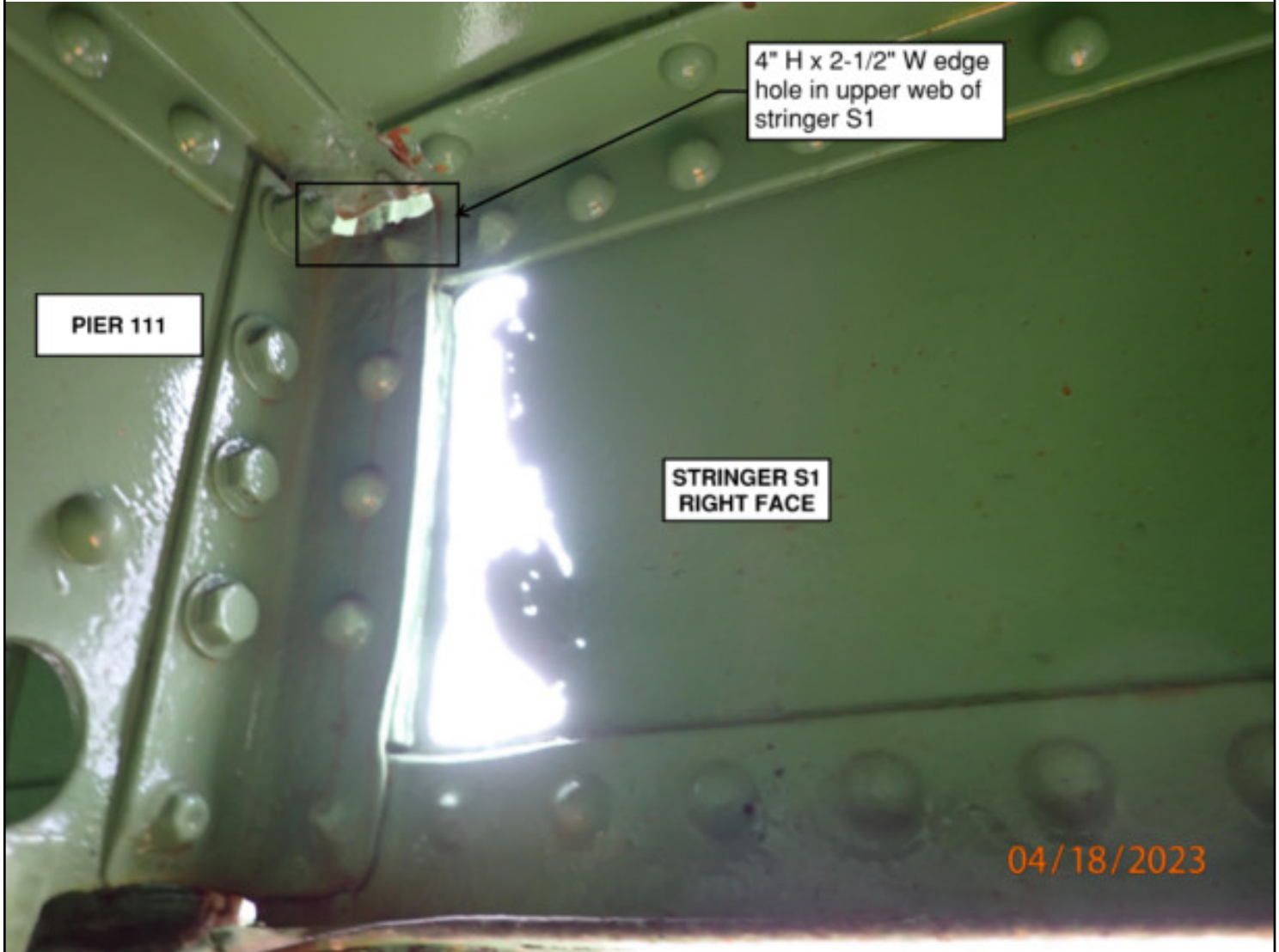
Photo Filename: P4182301.JPG



**Attachment Description:** Close up view of bottom flange of Stringer S1 at Pier 111. The left side bottom flange angle has 3/16" D section loss for 3' L x 3" W with a 1 1/4" diameter corrosion hole. The right side bottom flange angle has up to 1/8" D section loss for 15" L with a 2" L x 5/8" W corrosion hole at the horizontal leg. Looking Begin-Up.

Photo Number: 9

Photo Filename: P4182293.JPG



**Attachment Description:** The right bottom flange angle of Stringer S1 at Pier 111 has up to 1/8" D section loss for 15" L with a 2" L x 5/8" W corrosion hole at the horizontal leg. Looking Begin-Left.